

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.-44. (Canceled)

45. (Currently Amended) A method for manufacturing a semiconductor device comprising steps of:

providing a material for promoting crystallization to at least a part of a semiconductor film formed over a substrate;

subjecting said semiconductor film to oxygen plasma ~~to form a gate insulating film on said semiconductor film~~; and

crystallizing said semiconductor film after subjecting said semiconductor film to the oxygen plasma to obtain a crystalline semiconductor film.

46. (Previously Presented) A method according to claim 45, wherein said crystallizing is performed by crystallizing said semiconductor film by irradiating with one of an infrared ray and a laser light.

47. (Previously Presented) A method according to claim 45, wherein said semiconductor film is crystallized through one of a solid state and an intermediate state between the solid state and a liquid state.

48. (Previously Presented) A method according to claim 45, wherein said gate insulating film is continuously formed without exposing to the air after forming said semiconductor film.

49. (Currently Amended) A method for manufacturing a semiconductor device comprising steps of:

providing a material for promoting crystallization to at least a part of a semiconductor film formed over a substrate;

subjecting said semiconductor film to plasma comprising oxygen and helium to form a gate insulating film on said semiconductor film; and

irradiating said semiconductor film after subjecting said semiconductor film to the plasma with one of an infrared ray and a laser light.

50. (Previously Presented) A method according to claim 49, wherein said semiconductor film is crystallized through one of a solid state and an intermediate state between the solid state and a liquid state.

51. (Canceled)

52. (Currently Amended) A method for manufacturing a semiconductor device comprising steps of:

providing a material for promoting crystallization to at least a part of a semiconductor film formed over a substrate;

subjecting said semiconductor film to oxygen plasma to form a gate insulating film on said semiconductor film;

crystallizing said semiconductor film after subjecting said semiconductor film to the oxygen plasma using said material, to obtain a crystalline semiconductor film;

patternning said crystalline semiconductor film and said gate insulating film;

forming a second gate insulating film so as to cover said crystalline semiconductor film and said gate insulating film after patterning them.

53. (Previously Presented) A method according to claim 52, wherein said crystallizing is performed by crystallizing said semiconductor film by irradiating with one of an infrared ray and a laser light.

54. (Previously Presented) A method according to claim 52, wherein said semiconductor film is crystallized through one of a solid state and an intermediate state between the solid state and a liquid state.

55. (Canceled)

56. (Currently Amended) A method for manufacturing a semiconductor device comprising steps of:

providing a material for promoting crystallization to at least a part of a semiconductor film formed over a substrate;

subjecting said semiconductor film to oxygen plasma ~~to form a gate insulating film on said semiconductor film;~~

irradiating said semiconductor film after subjecting said semiconductor film to the oxygen plasma with one of an infrared ray and a laser light; and

patterning said crystalline semiconductor film.

57. (Previously Presented) A method according to claim 56, further comprising a step of forming a second gate insulating film on the patterned semiconductor film.

58. (Previously Presented) A method according to claim 56, wherein said semiconductor film is crystallized through one of a solid state and an intermediate state between the solid state and a liquid state.

59. (Canceled)

60. (Currently Amended) A method for manufacturing a semiconductor device comprising steps of:

providing at least one metal element to at least a part of a semiconductor film formed over a substrate;

subjecting said semiconductor film to oxygen plasma ~~to form a gate insulating film on said semiconductor film~~;

crystallizing said semiconductor film after subjecting said semiconductor film to the oxygen plasma to obtain a crystalline semiconductor film; and

patterning said crystalline semiconductor film.

61. (Previously Presented) A method according to claim 60, wherein said crystallizing is performed by crystallizing said semiconductor film by irradiating with one of an infrared ray and a laser light.

62. (Previously Presented) A method according to claim 60, wherein said semiconductor film is crystallized through one of a solid state and an intermediate state between the solid state and a liquid state.

63. (Canceled)

64. (Currently Amended) A method for manufacturing a semiconductor device comprising steps of:

providing at least one metal element to at least a part of a semiconductor film formed over a substrate;

subjecting said semiconductor film to oxygen plasma ~~to form a gate insulating film on said semiconductor film~~; and

irradiating said semiconductor film after subjecting said semiconductor film to the oxygen plasma with one of an infrared ray and a laser light.

65. (Previously Presented) A method according to claim 64, wherein said semiconductor film is crystallized through one of a solid state and an intermediate state between the solid state and a liquid state.

66. (Canceled)

67. (Previously Presented) A method according to claim 45, wherein said material for promoting crystallization is selected from the group consisting of Ni, Fe, Co, Pt, Cu, Au, Ge, Ru, Rh, Pd, Os, Ir, and Pb.

68. (Previously Presented) A method according to claim 49, wherein said material for promoting crystallization is selected from the group consisting of Ni, Fe, Co, Pt, Cu, Au, Ge, Ru, Rh, Pd, Os, Ir, and Pb.

69. (Previously Presented) A method according to claim 52, wherein said material for promoting crystallization is selected from the group consisting of Ni, Fe, Co, Pt, Cu, Au, Ge, Ru, Rh, Pd, Os, Ir, and Pb.

70. (Previously Presented) A method according to claim 56, wherein said material for promoting crystallization is selected from the group consisting of Ni, Fe, Co, Pt, Cu, Au, Ge, Ru, Rh, Pd, Os, Ir, and Pb.

71. (Previously Presented) A method according to claim 60, wherein said metal element for promoting crystallization is selected from the group consisting of Ni, Fe, Co, Pt, Cu, Au, Ge, Ru, Rh, Pd, Os, and Ir.

72. (Previously Presented) A method according to claim 64, wherein said metal element for promoting crystallization is selected from the group consisting of Ni, Fe, Co, Pt, Cu, Au, Ge, Ru, Rh, Pd, Os, and Ir.